

CLAIM AMENDMENTS

IN THE CLAIMS:

This listing of the claims will replace all prior versions, and listing, of claims in the application or previous response to office action:

1. (Previously presented) A bone anchor device for attaching connective tissue to bone, comprising:

an anchor body comprising a longitudinal axis extending from a proximal end to a distal end, said anchor body having a size suitable for being inserted into a bone tunnel or passageway drilled in a human bone;

at least three suture retaining apertures axially spaced along said axis in said anchor body such that a distance along said longitudinal axis is present between adjacent suture retaining apertures, each of said suture retaining apertures extending through said anchor body wherein said suture retaining apertures extend in a direction substantially transverse to said longitudinal axis; and

a bone securing structure for securing said anchor body in bone, said bone securing structure comprising a first radially narrow profile orientation and a second radially large profile orientation.

2. (Withdrawn) The bone anchor device as recited in Claim 1, wherein said plurality of suture retaining apertures comprises two suture retaining apertures.

3. (Previously presented) The bone anchor device as recited in Claim 1, wherein said plurality of suture retaining apertures comprises only three suture retaining apertures.

4. (Withdrawn) The bone anchor device as recited in Claim 1, wherein said plurality of suture retaining apertures comprises four suture retaining apertures.

5. (Cancelled).

6. (Previously presented) The bone anchor device as recited in Claim 1, wherein at least two of said plurality of suture retaining apertures are transversely offset from one another relative to said longitudinal axis.

7. (Original) The bone anchor device as recited in Claim 6, wherein a first of the at least two of said plurality of suture retaining apertures is disposed on one side of the longitudinal axis and a second of the at least two of said plurality of suture retaining apertures is disposed on the other side of the longitudinal axis.

8. (Previously presented) The bone anchor device as recited in Claim 1, wherein said securing structure comprises a pair of deployable flaps.

9. (Original) The bone anchor device as recited in Claim 1, wherein said anchor body comprises a substantially planar surface in which said plurality of suture retaining apertures are disposed.

10. (Original) The bone anchor device as recited in Claim 9, wherein said anchor body comprises opposing substantially flat surfaces, said plurality of suture retaining apertures extending through said entire anchor body.

11. (Original) The bone anchor device as recited in Claim 1, and further comprising a stem extending proximally from a proximal end of said anchor body.

12. (Original) The bone anchor device as recited in Claim 11, and further comprising a longitudinal slit, at least a portion of which is disposed in said stem.

13. (Cancelled).

14. (Cancelled).

15. (Cancelled).

16. (Previously presented) A bone anchor device for attaching connective tissue to bone, comprising:

an anchor body comprising two surfaces and made from a material that is compatible with the human body and suitable for implantation in the human body;

a suture retaining aperture disposed in said anchor body and extending through both of said surfaces;

a bone locking structure radially extending from said anchor body and adapted to affix said device in a bone tunnel; and

a length of suturing material extending through said suture retaining aperture, wherein said suturing material is a material that is compatible with the human body and suitable for implantation in the human body wherein said length of suturing material is looped about said anchor body and contacts substantial portions of both of said two surfaces and wherein a first portion of the length of suturing material is looped over a second portion of the length of suturing material, the second portion of which lies in contacting engagement with one of said surfaces of said anchor body.

17. (Cancelled).

18. (Original) The bone anchor device as recited in Claim 16, and further comprising a second suture retaining aperture disposed in said anchor body in axially spaced relation to said suture retaining aperture, wherein said length of suture retaining material is looped through both of said suture retaining apertures.

19. (Withdrawn) A method for securing connective tissue to bone, comprising:
securing a first end of a length of suture to a portion of soft tissue to be attached to a portion of bone;

threading a second end of the length of suture sequentially through a plurality of suture retaining apertures in a body of a bone anchor device so that the length of suture is securely fastened to said bone anchor body;

placing said bone anchor body in a blind hole disposed in said portion of bone; and

deploying structure on said bone anchor body in an outward direction to secure said bone anchor body in said blind hole.

20. (Withdrawn) The method as recited in Claim 19, and further comprising a step of securing a proximal end of the length of suture to said anchor body.

21. (Previously presented) The bone anchor device as recited in Claim 16, and further comprising a third suture retaining aperture.

22. (Previously presented) The bone anchor device as recited in Claim 16, wherein said suture is threaded through said suture retaining aperture such that two parallel legs of said suture extend through said suture retaining aperture and form said loop.

23. (Previously presented) The bone anchor device as recited in Claim 16 wherein said bone locking structure has a first orientation and a second orientation different than said first orientation.

24. (Previously presented) The bone anchor device as recited in claim 23 wherein said bone locking structure comprises a deployable member comprising a first shape and a second deployed shape different the first shape.

25. (Previously presented) The bone anchor device of claim 16 wherein said bone locking structure is thread-free.

26. (Cancelled) A method for securing connective tissue to bone, comprising:

providing a bone anchor device comprising an anchor body, and a plurality of suture retaining apertures adapted to allow a suture to extend there through;

securing a first end of a length of suture to a portion of soft tissue to be attached to a portion of bone;

threading a second end of the length of suture sequentially through said plurality of suture retaining apertures in said body of said bone anchor device so that the length of suture is securely fastened to said bone anchor body;

placing said bone anchor device in a hole disposed in said portion of bone; and
deploying structure of the bone anchor to affix the bone anchor in said hole.